

**Massachusetts Department of Environmental Protection
Drinking Water Program
Public Notification**

TIER 1 TEMPLATES

The pages that follow contain templates for Tier 1 violations and waterborne disease outbreaks, as listed below. Along with each template are instructions, including the required method of delivery and instructions for completing individual sections of the notice. These templates have been adapted for Massachusetts' public water systems from the EPA and the Association of State Drinking Water Administrators (ASDWA) *Public Notification Handbook*. The EPA/ASDWA *Handbook* provides additional aids to help water systems develop notices for violation situations. An electronic copy of the Public Notification Handbook is available at EPA's web site (www.epa.gov/safewater/pn.html). **Please note that the EPA/ASDWA Handbook templates are non-state specific so Massachusetts's water suppliers are required to use the Massachusetts' version of the templates for compliance purposes.** Electronic copies of the Massachusetts' public notification templates are available on the DEP website <http://www.state.ma.us/dep/brp/dws/publnot.htm>.

Mandatory language on health effects, which must be included exactly as written, is presented in *italics* (310 CMR 22.16(5)(d)).

You must also include the following italicized language in all notices, where applicable (310 CMR 22.16(5)(d)). Use of this language does *not* relieve you of your obligation to take steps reasonably calculated to notify all persons served:

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Templates

Nitrate Notice--Template 1-1
Spanish Nitrate Notice--Template 1-1A
Fecal Coliform or *E. coli* Notice--Template 1-2
Spanish Fecal Coliform or *E. coli* Notice --Template 1-2A
Waterborne Disease Outbreak Notice--Template 1-3
Turbidity Single Exceedance as Tier 1--Template 1-4
Chlorine Dioxide MRDL Notice--Template 1-5
Tier 1 Problem Corrected Notice--Template 1-6

Instructions for Nitrate Notice Template 1-1

Template on Following Page

Since exceeding the nitrate maximum contaminant level is a Tier 1 violation, you must provide public notice to persons served as soon as practical but within 24 hours after you learn of the violation (310 CMR 22.16(2)(b)). During this time period you must also contact your regional office of the Massachusetts Department of Environmental Protection, (DEP) Drinking Water Program. You should also coordinate with your local health department. **This template is also applicable to nitrite and total nitrate and nitrite violations.** You must use one or more of the following methods to deliver the notice to consumers (310 CMR 22.16(2)(c)):

- Radio
- Television
- Hand or direct delivery
- Posting in conspicuous locations
- In addition to one (or more) of the above methods, you must publish the Tier 1 public notice within your local newspaper as a one-day advertisement no later than 14 days after the violation. A copy must be submitted to DEP no later than the time published.

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), since notice must be provided in a manner reasonably calculated to reach all persons served.

The notice on the following page is appropriate for hand delivery or a newspaper notice. However, you may wish to modify it before using it for a radio or TV notice. If you do, you must still include all required elements and leave the health effects language in italics unchanged. This language is mandatory (310 CMR 22.16(5)(d)). See Chapter 8 of the EPA and the Association of State Drinking Water Administrators (ASDWA) *Public Notification Handbook* for a notice designed for posting. If you post or hand deliver, print your notice on letterhead, if available.

Alternative Sources of Water

If you are providing alternative sources of water for infants, your notice should say where it could be obtained. Remember that bottled water can also be contaminated. If you are providing bottled water, make sure it meets the standard for nitrates by contacting Massachusetts Department of Public Health and the bottler and asking for the most recent test results.

Repeat Notices

If this is a repeat notice (as required by DEP Drinking Water Program), or if your system's nitrate levels fluctuate around the MCL, you may wish to include an explanation similar to the following:

You were initially notified of high nitrate levels on [date]. Since that time we have been monitoring the nitrate concentration every three months. Seasonal fluctuations in nitrate concentrations have been observed, due to nitrates contained in fertilizer. It appears that high nitrates occur during the later summer and fall. Note that prior to [year] we were meeting drinking water standards for nitrate.

Corrective Action

In your notice, describe corrective actions you are taking. The bullet below describes one action commonly taken by water systems with nitrate/nitrite violations. Use this language, if appropriate, or develop your own:

- We are investigating water treatment and other options. These may include drilling a new well, mixing the water with low-nitrate water from another source, or buying water from another water system.

After Issuing the Notice

Make sure to send your regional office of the DEP Drinking Water Program and local Board of Health a copy of each type of notice and a certification that you have met all the public notice requirements within ten days after issuing the notice (310 CMR 22.15(3)(b)). You should also issue a follow-up notice in addition to meeting any repeat notice requirements DEP Drinking Water Program sets.

You should notify health professionals in the area of the violation. People may call their doctors with questions, and the doctors should have the information they need to respond appropriately. They also need to make sure the water is not provided to infants in their care



DRINKING WATER WARNING

[System] water has high levels of nitrate

DO NOT GIVE THE WATER TO INFANTS UNDER 6 MONTHS OLD OR USE IT TO MAKE INFANT FORMULA

Water sample results received [date] showed nitrate levels of [level and units]. This is above the nitrate standard, or maximum contaminant level (MCL), of 10 mg/l. Nitrate in drinking water is a serious health concern for infants less than six months old.

What should I do?

- **DO NOT GIVE THE WATER TO INFANTS.** *Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.* Blue baby syndrome is indicated by blueness of the skin. Symptoms in infants can develop rapidly, with health deteriorating over a period of days. If symptoms occur, seek medical attention immediately.
- Water, juice, and formula for children under six months of age should not be prepared with tap water. Bottled water or other water low in nitrates should be used for infants until further notice.
- **DO NOT BOIL THE WATER.** Boiling, freezing, filtering, or letting water stand does not reduce the nitrate level. Excessive boiling can make the nitrates more concentrated, because nitrates remain behind when the water evaporates.
- Adults and children older than six months can drink the tap water (nitrate is a concern for infants because they can not process nitrates in the same way adults can). However, if you are pregnant or have specific health concerns, you may wish to consult your doctor.

What happened? What is being done?

Nitrate in drinking water can come from natural, industrial, or agricultural sources (including septic systems and run-off). Levels of nitrate in drinking water can vary throughout the year. We will let you know when the amount of nitrate is again below the limit.

[Describe corrective action, seasonal fluctuations, and when system expects to return to compliance.]

For more information, please contact [name of contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by [system]:

PWS ID#:

Date distributed:

Instructions for Spanish Nitrate Notice Template 1-1A

Template on Following Page

The template on following page is a Spanish translation of Template 1-1 for nitrate. All the instructions of Template 1-1 apply. If you modify the English template, you should modify this template accordingly. Schools or universities may be able to provide low cost translations. See page 12 of the EPA and the Association of State Drinking Water Administrators (ASDWA) *Public Notification Handbook* for suggestions on multilingual notices.



AVISO SOBRE SU AGUA POTABLE

Agua del sistema [system name] tiene altos niveles de nitratos - NO DAR DE BEBER ESTA AGUA A BEBES MENORES DE 6 MESES DE EDAD NI USARLA PARA HACER LECHE DE FORMULA

Resultados de muestras de agua recibidos en [date of violation in Spanish (day-month-year)] muestran concentraciones de nitratos en el agua de [level and units in Spanish]. Este nivel está por encima de la norma, o nivel máximo de contaminación (NMC) de 10 mg/l. Nitratos en agua potable puede generar serios problemas de salud para bebés menores de 6 meses de edad.

¿Que debo hacer?

- **NO LE DE ESTA AGUA A BEBES.** *Bebes menores de seis (6) meses que ingieran agua con nitratos en exceso del nivel máximo de contaminación (NMC) se pueden enfermar seriamente y, de no ser tratados, pueden morir. Los síntomas incluyen dificultad en respirar y síndrome de bebé azul.* El síndrome de bebé azul se refiere al color azulado que toma la piel del bebé. Los síntomas en los bebes pueden desarrollarse con rapidez, con el deterioro de su salud en los días subsiguientes. Si los síntomas ocurren en infantes menores de seis (6) meses de edad, busque atención médica inmediatamente.
- Agua, jugo o leche en polvo para bebés menores de seis (6) meses de edad no debe prepararse con agua del grifo. Debe emplear agua embotellada u otra agua baja en nitratos hasta próximo aviso.
- **No hierva el agua.** Hervir, congelar, filtrar o dejar el agua en reposo no reduce el nivel de nitratos. De hecho, al hervir el agua puede aumentar aún más la concentración de nitratos, debido a que los nitratos permanecen cuando parte del agua se evapora.
- Adultos e infantes mayores de seis (6) meses de edad pueden tomar el agua del grifo. (Los nitratos son peligrosos para los bebes debido a que ellos no pueden procesar los nitratos de la misma manera que los adultos). Sin embargo, si usted está embarazada o tiene algún problema de salud en particular, puede optar por hacer una consulta con su médico.

¿Qué pasó? ¿Qué se está haciendo al respecto?

Nitratos en el agua pueden provenir de fuentes naturales, industriales or de la agricultura (incluyendo descargas de tanques sépticos y lluvias). Las concentraciones de nitratos en el agua potable varían a lo largo del año. Nosotros les avisaremos cuando los niveles de nitratos estén nuevamente debajo del límite.

[Describe corrective action, seasonal fluctuations, and when the system expects to return to compliance in Spanish.] Para mayor información, favor contactar a [name of contact] al teléfono [phone number] o escribiendo a [mailing address].

Por favor comparta esta información con otros que pueden tomar de esta agua, colocando este aviso en lugares visibles, o remitiéndolo por correo, o entregandolo manualmente. Es de particular interés distribuir este aviso ampliamente si usted lo recibe representando un negocio, un hospital u hogar de infantes u hogar de ancianos o comunidad residencial.

Este aviso ha sido enviado a usted por [system].

PWS ID#:

Fecha de distribución:

Instructions for Fecal Coliform or *E. Coli* Notice Template 1-2

Templates on Following Page

Since exceeding the fecal coliform or *E. coli* maximum contaminant level is a Tier 1 violation, you must provide public notice to persons served as soon as practical but within 24 hours after you learn of the violation (310 CMR 22.16(2)(b)). During this time, you must also contact your regional office of the DEP Drinking Water Program. You should also coordinate with your local board of health or health department. You may also have to modify the template if you also have high nitrate levels or other coliform MCL violations. You must use one or more of the following methods to deliver the notice to consumers (310 CMR 22.16(2)(c)):

- Radio
- Television
- Hand or direct delivery
- Posting in conspicuous locations
- In addition to one (or more) of the above methods, you must publish the Tier 1 public notice within your local newspaper as a one-day advertisement no later than 14 days after the violation. A copy must be submitted to DEP no later than the time published.

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), since notice must be provided in a manner reasonably calculated to reach all persons served.

The notice on the following page is appropriate for hand delivery or a newspaper notice. However, you may wish to modify it before using it for a radio or TV notice. If you do, you must still include all required elements and leave the health effects language in italics unchanged. This language is mandatory ((310 CMR 22.16(5)(d)). See Chapter 8 of the EPA and the Association of State Drinking Water Administrators (ASDWA) *Public Notification Handbook* for a notice designed for posting. If you post or hand deliver, print your notice on letterhead, if you have it.

Population Served

Make sure it is clear who is served by your water system--you may need to list the areas you serve.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with fecal coliform or *E. coli* violations. Use one or more of the following actions, if appropriate, or develop your own:

- We are chlorinating and flushing the water system.
- We are switching to an alternate drinking water source.
- We are increasing sampling for coliform bacteria to determine the source of the contamination.
- We are repairing the wellhead seal.
- We are repairing the storage tank.
- We are restricting water intake from the river/lake/reservoir to prevent additional bacteria from entering the water system and restricting water use to emergencies.

After Issuing the Notice

Send a copy of each type of notice and a certification that you have met all the public notice requirements to your regional office of the DEP Drinking Water Program and local Board of Health within ten days from the time you issue the notice (310 CMR 22.15(3)(b)).

It is recommended that you notify health professionals in the area of the violation. People may call their doctors with questions about how the violation may affect their health, and the doctors should have the information they need to respond appropriately. In addition, health professionals, including dentists, use tap water during their procedures and need to know of contamination so they can use bottled water. It is a good idea to issue a **problem corrected notice** when the violation is resolved. See Template 1-6.

DRINKING WATER WARNING

[System] water is contaminated with [fecal coliform] or [*E. coli*]

BOIL YOUR WATER BEFORE USING

Fecal coliform [or *E. coli*] bacteria were found in the water supply on [date]. These bacteria can make you sick, and are a particular concern for people with weakened immune systems.

What should I do?

- **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a boil, let it boil for one minute, and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, and food preparation **until further notice**. Boiling kills bacteria and other organisms in the water.
- *Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.*
- The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice. People at increased risk should seek advice about drinking water from their health care providers.

What happened? What is being done?

Bacterial contamination can occur when increased run-off enters the drinking water source (for example, following heavy rains). It can also happen due to a break in the distribution system (pipes) or a failure in the water treatment process.

[Describe corrective action.] We will inform you when tests show no bacteria and you no longer need to boil your water. We anticipate resolving the problem within [estimated time frame].

For more information, please contact [name of contact] at [phone number] or [mailing address]. General guidelines on ways to lessen the risk of infection by microbes are available from the EPA Safe Drinking Water Hotline at 1(800) 426-4791.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by [system].

PWS ID#:

Date distributed:

Instructions for Spanish Fecal Coliform or *E. Coli* Notice Template 1-2A

Template on Following Page

The template on following page is a Spanish translation of Template 1-2 (Boil/Non-Boil) for fecal coliform or *E. coli*. All the instructions of Template 1-2 apply. If you modify the English template, you should modify this template accordingly. Schools or universities may be able to provide low cost translations. See page 12 of the EPA and the Association of State Drinking Water Administrators (ASDWA) *Public Notification Handbook* for suggestions on multilingual notices.

AVISO SOBRE SU AGUA POTABLE

El Agua del Sistema [system name] esta contaminado con [bacterias coliformes fecales]
[*E. coli*]

HIERVAN EL AGUA ANTES DE USARLA

Bacterias coliformes fecales (o *E. coli*) fueron encontradas en su servicio de agua el día [date of violation in Spanish (day-month-year)]. Estas bacterias pueden enfermarle, y son especialmente peligrosas para personas con las defensas bajas o sistemas inmunológicos débiles.

¿Que debo hacer?

- **NO BEBA EL AGUA SIN ANTES HERVIRLA.** Hierva toda el agua, déjela hervir por un minuto, y déjela reposar antes de usarla, o utilice agua embotellada. Agua hervida o embotellada debe ser usada para beber, hacer hielo, lavarse los dientes, lavar los platos y para preparar la comida hasta próximo aviso. Hierviendo mata a bacteria y otros organismos en el agua.
- *Coliformes fecales o E. coli son bacterias cuya presencia indica que el agua esta contaminada con desechos humanos o de animales. Microbios de esos desechos pueden causar diarrea, cólicos, nausea, dolores de cabeza u otros síntomas. Pueden representar un peligro para la salud de bebés, niños y niñas de corta edad, algunos ancianos, y personas con sistemas inmunológicos en alto riesgo.*
- Los síntomas descritos arriba no ocurren solamente debido a los microbios. También pueden ser causados por otros motivos. Si usted siente estos síntomas y estos persisten, usted puede optar por hacer una consulta con su médico. Personas en situaciones de alto riesgo deben consultar con sus proveedores de servicios médicos.

¿Qué pasó? ¿Qué se está haciendo al respecto?

Contaminación bacteriana puede ocurrir cuando exceso de aguas rebasan sus cauces y entran a las fuentes de agua potable (por ejemplo, luego de una lluvia fuerte). También pueden ocurrir cuando se rompe un sistema de recolección de aguas negras, o cuando hay una falla en el tratamiento de agua.

[Describe corrective action in Spanish] Le informaremos cuando las pruebas demuestren que no hay bacterias y que usted ya no necesita hervir su agua. Anticipamos que resolveremos el problema el [date of expected resolution in Spanish day-month-year].

Para mayor información, por favor póngase en contacto con [contact name] al [phone number] o escribiendo a [mailing address].

Por favor comparta esta información con otros que pueden tomar de esta agua, colocando este aviso en lugares visibles, o remitiéndolo por correo, o entregándolo manualmente. Es de particular interés distribuir este aviso ampliamente si usted lo recibe representando un negocio, un hospital u hogar de infantes u hogar de ancianos o comunidad residencial.

Este aviso ha sido enviado a usted por [system].

PWS ID#:

Fecha de distribución:

Instructions for Waterborne Disease Outbreak Notice Template 1-3

Template on Following Page

Since a waterborne disease outbreak is a Tier 1 situation, you must provide public notice to persons served as soon as practical but within 24 hours after you learn of the situation (310 CMR 22.16(2)(b)). You must also contact your regional office of the DEP Drinking Water Program during this time. You should coordinate with your local board of health or health department as well. **You must issue a public notice if you are experiencing a waterborne emergency other than a waterborne disease outbreak, such as one caused by flooding or treatment failure. In such cases, you may be able to modify this template to apply to your situation.** Check with your regional office of the DEP Drinking Water Program for more direction. More information on waterborne disease outbreaks and emergencies is available from the Centers for Disease Control and Prevention (www.cdc.gov/health/diseases.htm, 1(800) 311-3435). For a waterborne disease outbreak or other emergency, you must use one or more of the following methods to deliver the notice to consumers (310 CMR 22.16(2)(c)):

- Radio
- Television
- Hand or direct delivery
- Posting in conspicuous locations
- In addition to one (or more) of the above methods, you must publish the Tier 1 public notice within your local newspaper as a one day advertisement no later than 14 days after the violation. A copy must be submitted to DEP no later than the time published.

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), since notice must be provided in a manner reasonably calculated to reach all persons served. If you post or hand deliver, print your notice on letterhead, if available. The notice on the following page is appropriate for hand delivery or a newspaper notice. However, you may wish to modify it before using it for a radio, TV notice, or posting.

Describing the Outbreak

If known, list any organisms detected, the number of affected people, any water treatment problems contributing to the waterborne disease outbreak, and any sources of contamination, such as flooding.

Potential Health Effects

No mandatory health effects language exists for waterborne disease outbreaks. You may wish to use the sentence below, if appropriate, or contact the DEP Drinking Water Program. These symptoms are common to many diseases caused by microscopic organisms:

- Symptoms may include nausea, cramps, diarrhea, jaundice, and associated headaches and fatigue.

Population at Risk

Some people who contract waterborne diseases can be affected more severely than others, as described on the following page. The specific language on the following page is not mandatory, but you must provide information on the population at risk. In addition, make sure it is clear who is served by your water system -you may need to list the areas you serve.

Corrective Action

In your notice, describe the corrective actions you are taking. Listed below are some steps commonly taken by water systems with waterborne disease outbreaks. Use one or more of the following actions, if appropriate, or develop your own:

- We are repairing our filtration system.
- We are increasing sampling for disease-causing organisms.

Make sure to send a copy of each type of notice and a statement certifying that you have met all public notification requirements to your regional office of the DEP Drinking Water Program and local Board of Health within ten days after issuing the notice (310 CMR 22.15(3)(b)). It is a good idea to issue a **problem corrected notice** when the waterborne disease outbreak is under control. See Template 1-6.

It is recommended that you notify health professionals in the area of the outbreak. People may call their doctors with questions about how the situation may affect their health, and the doctors should have the information they need to respond appropriately. In addition, health professionals, including dentists, use tap water during their procedures and need to know of contamination so they can use bottled water.

DRINKING WATER WARNING

BOIL YOUR WATER BEFORE USING

Disease-causing organisms have entered [systems] water supply.

These organisms are causing illness in people served by [system]. We learned of a waterborne disease outbreak from Massachusetts Department of Environmental Protection on [date].

What should I do?

- **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a boil, let it boil for one minute, and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, and food preparation until further notice. Boiling kills bacteria and other organisms in the water.
- [Describe symptoms of the waterborne disease.] If you experience one or more of these symptoms and they persist, contact your doctor. People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers.

What happened? What is being done?

[Describe the outbreak, corrective action, and when the outbreak might end.]

We will inform you when you no longer need to boil your water.

For more information, please contact [name of contact] at [phone number] or [mailing address]. General guidelines on ways to lessen the risk of infection by microbes are available from the EPA Safe Drinking Water Hotline at 1(800) 426-4791.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by [system].

PWS ID#:

Date distributed:

Instructions for Notice for Turbidity Single Exceedance as Tier 1 Template 1-4

Template on Following Page

If your regional office of the DEP Drinking Water Program has designated this turbidity single exceedance as a Tier 1 violation (310 CMR 22.16(2)(a)). You must provide public notice to persons served within 24 hours after it has been designated Tier 1 (310 CMR 22.16(2)(b)). Turbidity violations are Tier 2 by default, but may frequently be elevated to Tier 1 by your regional office of the DEP Drinking Water Program. In addition, violations are automatically elevated if you are unable to consult with your regional office of the DEP Drinking Water Program within 24 hours. **In such cases, you must issue a notice within the next 24 hours.** You may elevate the violation to Tier 1 yourself as well. You should also coordinate with your local board of health or health department. One or both agencies should tell you whether to instruct consumers to boil water. You must use one or more of the following methods to deliver the notice to consumers (310 CMR 22.16(2)(c)):

- Radio
- Television
- Hand or direct delivery
- Posting in conspicuous locations
- In addition to one (or more) of the above methods, you must publish the Tier 1 public notice within your local newspaper as a one day advertisement no later than 14 days after the violation. A copy must be submitted to DEP no later than the time published.

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), since notice must be provided in a manner reasonably calculated to reach all persons served. If you post or hand deliver, print your notice on letterhead, if you have it.

The notice on the following page is appropriate for hand delivery or a newspaper notice. However, you may wish to modify it before using it for a radio or TV notice or posting. If you modify the notice, you must leave the health effects language in italics unchanged. This language is mandatory ((310 CMR 22.16(5)(d))).

Population Served

Make sure it is clear who is served by your water system--you may need to list the areas you serve.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with turbidity single exceedance. Use one or more of the following actions, if appropriate, or develop your own:

- We are adding chemicals that reduce turbidity.
- We are sampling both untreated and treated water for the presence of coliform bacteria.
- We are monitoring chlorine levels and will adjust them as needed to compensate for filtration problems.
- We are inspecting and cleaning the filters.

Source of the Problem

If you know why the turbidity is high, explain it in your notice. For instance, unusual conditions, such as heavy rains and flooding, can overburden the water plant, and treated water may therefore not meet the standards. In addition, run-off from parts of the watershed could contain increased concentrations of sediment and animal waste.

After Issuing the Notice

Send a copy of each type of notice and a certification that you have met public notice requirements to your regional office of the DEP Drinking Water Program and local Board of Health within ten days after you issue the notice ((310 CMR 22.15(3)(b))). It is a good idea to issue a **problem corrected notice** when the violation is resolved. See Template 1-6.

It is recommended that you notify health professionals in the area of the violation. People may call their doctors with questions about how the violation may affect their health, and the doctors should have the information they need to respond appropriately. In addition, health professionals, including dentists, use tap water during their procedures and need to know of potential microbiological contamination so they can use bottled water.



DRINKING WATER WARNING



[System] has high turbidity levels

BOIL YOUR WATER BEFORE USING

We routinely monitor your water for turbidity (cloudiness). This tells us whether we are effectively filtering the water supply. A water sample taken [date] showed turbidity levels of [number] turbidity units. This is above the standard of [standard] turbidity units. Because of these high levels of turbidity, there is an increased chance that the water may contain disease-causing organisms.

What should I do?

- **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a boil, let it boil for one minute, and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, washing dishes, brushing teeth, and food preparation until further notice.
- *Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.* People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers.
- The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.

What happened? What is being done?

[Describe reason for the high turbidity, corrective action, and when the system expects to return to compliance.]

We will inform you when turbidity returns to appropriate levels and when you no longer need to boil your water.

For more information, please contact [name of contact] at [phone number] or [mailing address]. General guidelines on ways to lessen the risk of infection by microbes are available from the EPA Safe Drinking Water Hotline at 1(800) 426-4791.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by [system].

PWS ID#:

Date distributed:

Instructions for Chlorine Dioxide MRDL (Tier 1) Notice Template 1-5

Template on Following Page

Since exceeding the chlorine dioxide MRDL when one or more of the samples taken *in the distribution system* on the day after exceeding the MRDL at the entrance of the distribution system or when *required samples are not taken* in the distribution system is a Tier 1 violation, you must provide public notice to persons served as soon as practical but within 24 hours after you learn of the violation ((310 CMR 22.16(2)(b)). (Exceeding the chlorine dioxide MRDL *at the entry point to the distribution system only* is a Tier 2 violation; modify this template or Template 2-3 to create a Tier 2 notice.) You must also contact your regional office of the DEP Drinking Water Program within 24 hours of learning of the violation or situation. You should also coordinate with your local health department. You must use one or more of the following methods to deliver the notice to consumers (310 CMR 22.16(2)(c):

- Radio
- Television
- Hand or direct delivery
- Posting in conspicuous locations
- In addition to one (or more) of the above methods, you must publish the Tier 1 public notice within your local newspaper as a one day advertisement no later than 14 days after the violation. A copy must be submitted to DEP no later than the time published.

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), since notice must be provided in a manner reasonably calculated to reach all persons served. If you post or hand deliver, print your notice on letterhead, if you have it.

The notice on the following page is appropriate for hand delivery or a newspaper notice. However, you may wish to modify it before using it for a radio or TV notice. If you do, you must still include all required elements and leave the health effects language in italics unchanged. This language is mandatory ((310 CMR 22.16(5)(d)).

Alternative Sources of Water

If you are selling or providing bottled water, your notice should say where it can be obtained. Remember that bottled water can also be contaminated or be high in chlorine dioxide if the bottler uses municipal water. Make sure the bottled water meets the standard by contacting the bottler and asking for the most recent test results.

Population at Risk

The language on the following page lists young children as one of the groups at increased risk. Because the potential health effects of chlorine dioxide are based on tests on laboratory animals, there is no way to determine at exactly what age the water is safe to drink. If your consumers have questions, encourage them to err on the side of caution.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with chlorine dioxide violations. Use one or more of the following actions, if appropriate, or develop your own:

- We are resetting the generator to generate the correct amount of chlorine dioxide.
- We are repairing the generator.
- We have already fixed the problem but it will take additional time for the extra chlorine dioxide to be flushed from the distribution system (pipes).

After Issuing the Notice

Make sure to send your regional office of the DEP Drinking Water Program and local Board of Health a copy of each type of notice and a certification that you have met all the public notice requirements within ten days after issuing the notice (310 CMR 22.15(3)(b)). You should also issue a follow-up notice in addition to meeting any repeat notice requirements your regional office of the DEP Drinking Water Program sets.

It is a good idea to issue a **problem corrected notice** when the violation is resolved. See Template 1-6.

It is recommended that you notify health professionals in the area of the violation. People may call their doctors with questions about how the violation may affect their health, and the doctors should have the information they need to respond appropriately.



DRINKING WATER WARNING



PREGNANT WOMEN AND YOUNG CHILDREN SHOULD NOT DRINK THE WATER

Sampling results received [date] showed chlorine dioxide levels of [level and units]. This is above the standard, or maximum residual disinfectant level (MRDL) of 0.8 milligrams per liter. Chlorine dioxide is used for disinfection, but too much of it over a short period of time may harm the development of children, infants, and fetuses.

What should I do?

- **DO NOT USE THIS WATER IF YOU ARE PREGNANT OR GIVE IT TO YOUNG CHILDREN.** Bottled water should be used until further notice. *Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant mothers who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.*
- *The chlorine dioxide violations reported today include exceedances of the EPA standard within the distribution system which delivers water to consumers. Violations of the chlorine dioxide standard within the distribution system may harm human health based on short-term exposures. Certain groups, including fetuses, infants, and young children, may be especially susceptible to nervous system effects from excessive chlorine dioxide exposure. There are no obvious symptoms, but chlorine dioxide can affect development of the nervous system.*
- Water, juice, and formula for young children and for pregnant women should not be prepared with tap water.
- Adults who are not pregnant and older children can drink the tap water because their nervous systems are already developed. However, if you have specific health concerns, you may wish to consult your doctor.

What happened? What is being done?

Chlorine dioxide is used in small amounts every day to kill bacteria and other organisms that may be in your drinking water. A problem occurred with our chlorine dioxide generator, and too much chlorine dioxide was released. [Describe corrective action and when you expect to return to compliance.]

For more information, please contact [name of contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by [system].

PWS ID#:

Date distributed:

Instructions for Tier 1 Problem Corrected Notice Template 1-6

Template on Following Page

It is a good idea to issue a notice when a serious violation or situation has been resolved. Although DEP regulations do not require such notices, your regional office of the DEP Drinking Water Program may require you to issue one. You should coordinate with your local board of health or health department as well. Below are some recommended methods for a **problem corrected notice**. You should use the same delivery methods you used for the original notice.

- Radio
- Television
- Newspaper
- Hand or direct delivery
- Posting in conspicuous locations
- In addition to one (or more) of the above methods, you must publish the Tier 1 public notice within your local newspaper as a one day advertisement no later than 14 days after the violation. A copy must be submitted to DEP no later than the time published.

You may wish to use additional methods (e.g., delivery of multiple copies to hospitals, clinics, or apartment buildings) if necessary to reach all persons served. If you post or hand deliver, print your notice on letterhead, if available.

The notice on the following page is very general and can be used for any violation or situation. However, to help restore consumer's confidence in the water system, you should modify the notice to fit your situation. Although the public should have seen your initial notice, there may be additional information you learned after the notice was issued. Therefore, you should describe the violation or situation again and discuss how the problem was solved.

DRINKING WATER PROBLEM CORRECTED

Customers of [system] were notified on [date] of a problem with our drinking water and were advised to [describe recommended action]. We are pleased to report that the problem has been corrected and that it is no longer necessary to [describe recommended action]. We apologize for any inconvenience and thank you for your patience.

[Add further details here when appropriate.]

As always, you may contact [contact name] at [phone number] or [mailing address] with any comments or questions.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by [system].

PWS ID#:

Date distributed:
